

REMARKS

Claims 1-21 are all the claims pending in the application.

Preliminary Matters

Applicant thanks the Examiner for initialing the references filed with the Information Disclosure Statement filed on January 3, 2001, June 21, 2002, August 30, 2002 and November 22, 2002. Applicant also thanks the Examiner for accepting the drawings filed on January 3, 2001. Applicant further thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Claim Rejections under 35 U.S.C. § 102

Claims 1-2 and 11-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Terrell et al. (U.S. Patent No. 2002/0188720).

Claim 1 requires **an allocating section which determines a class identifier** indicative of one of classes to which an IP packet belongs, from header data of said IP packet received through one of said input communication lines, and **allocates an IP-QOS**. In other words, the present invention, as recited in claim 1 requires determining a class identifier and then allocating an IP-QOS.

The Applicant respectfully submits that Terrell, at best, discloses (or suggests) determining a class identifier. It does not disclose (or even remotely suggest) allocating IP-QOS.

The Examiner appears to read the IP-QOS of the present invention on the TOS code of Terrell. Such a TOS code in the packet indicated subscribed service level, namely best effort

(BE) or expedited forwarding (EF). As can be seen, such a ToS code deals merely with prioritizing the packets relative to each other. However, the ToS code is nothing more than the class identifier as used in the present invention. By no stretch of imagination, the class identifier (or ToS code) be construed to also mean the IP-QOS that is allocated.

For example, the ToS code merely indicates the priority class. The ToS code is used to indicate is whether a packet is to be assigned a priority of BE or EF. In Terrell, the received data packets are processed using an installed filter 212 at step 310. The data packet is then marked with the appropriate classifier. That is, the ToS field is marked with the appropriate service level, EF or BE (see Terrell, ¶ 0045). Subsequently, the packets are routed in accordance with their service level. Such a service level (consisting of EF and BE) is nothing more than a relative priority of sending the packets across the network.

However, IP-QOS is substantially more than simply assigning priority. It includes, for example, delay characteristic, discard ratios, etc (see Specification, p 2, ll. 15-17).

Terrell discloses ToS to mean only BE or EF priority classes. It has no teaching regarding the subsequent allocation of IP-QOS as required by the present invention.

Claim 1 is not anticipated (or suggested) by Terrell at least because it does not teach allocating an IP-QOS based on a class identifier.

Claim 2 is dependant on claim 1 and is allowable at least for the same reasons.

Claim 11 includes limitations analogous to claim 1. Therefore it should be allowed at least for analogous reasons.

Claim 12 is dependant on claim 11 and is allowable at least for the same reasons.

Claims Rejections under 35 U.S.C. § 103

A. Claims 3-5 and 13-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terrel et al. (U.S. Patent No. 2002/0188720), as applied to claims 1 and 11 above respectively, in view of Hoffman et al. (U.S. Patent No. 6,094,435).

Claims 3-5 and 13-15 are dependant on claims 1 and 11, respectively. Therefore, the reasons for the allowability of the base claims 1 and 11 are equally valid for claims 3-5 and 13-15, respectively. Further, Hoffman does not overcome the deficiency noted above in the primary reference Terrell. Specifically, Hoffman is cited for its alleged teaching on forwarding packets in a network based on its quality of service. However, Hoffman does not disclose or suggest allocating an IP-QOS based on a class identifier as required by the present invention. A skilled artisan would not have been able to practice the present invention based on the combined teachings of Turrell/Hoffman.

B. Claims 6, 8, 16, 18 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terrell et al. (U.S. Patent No. 2002/0188720), as applied to claims 1 and 11 above respectively, in view of Chen et al. (U.S. Patent No. 6,487,170).

Claims 6 and 8 are dependant on claim 1. Likewise claims 16, 18 and 19 are dependant on claim 11. Therefore, the reasons for the allowability of the base claims 1 and 11 are equally valid for claims 6, 8, 16, 18 and 19. Further, Chen does not overcome the deficiency noted above in the primary reference Terrell. Specifically, Chen is cited for its alleged teaching on forwarding packets in a network based on its quality of service. However, Chen does not disclose or suggest allocating an IP-QOS based on a class identifier as required by the present invention. A skilled artisan would not have been able to practice the present invention base don the combined teachings of Turrell/Chen.

C. Claims 7 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terrell et al. (U.S. Patent No. 2002/0188720), as applied to claims 1 and 11 respectively, in view of McCloghrie et al. (U.S. Patent No. 6,286,052).

Claims 7 and 17 are dependant on claims 1 and 11, respectively. Therefore, the reasons for the allowability of the base claims 1 and 11 are equally valid for claims 7 and 17. Further, McCloghrie does not overcome the deficiency noted above in the primary reference Terrell. Specifically, McCloghrie is cited for its alleged teaching for identifying data traffic flows applied to QOS networks and to assured forwarding (AF). However, McCloghrie does not disclose or suggest allocating an IP-QOS based on a class identifier as required by the present invention. A skilled artisan would not have been able to practice the present invention base don the combined teachings of Terrell/ McCloghrie.

D. Claims 9-10 and 20-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terrell et al. (U.S. Patent No. 2002/0188720), as applied to claims 1 and 11 above respectively, in view of Chen et al. (U.S. Patent No. 6,487,170) and Hoffman et al. (U.S. Patent No. 6,094,435).

Claims 9-10 and 20-21 are dependant on claims 1 and 11, respectively. Therefore, the reasons for the allowability of the base claims 1 and 11 are equally valid for claims 9-10 and 20-21, respectively. Further, as noted above, the combined teachings of Hoffman/Chen do not overcome the deficiency noted above in the primary reference Terrell. A skilled artisan would not have been able to practice the present invention based on the combined teachings of Terrell/Hoffman.

Conclusion


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Request for Reconsideration Under 37 C.F.R. § 1.111
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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